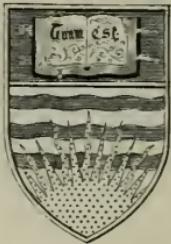


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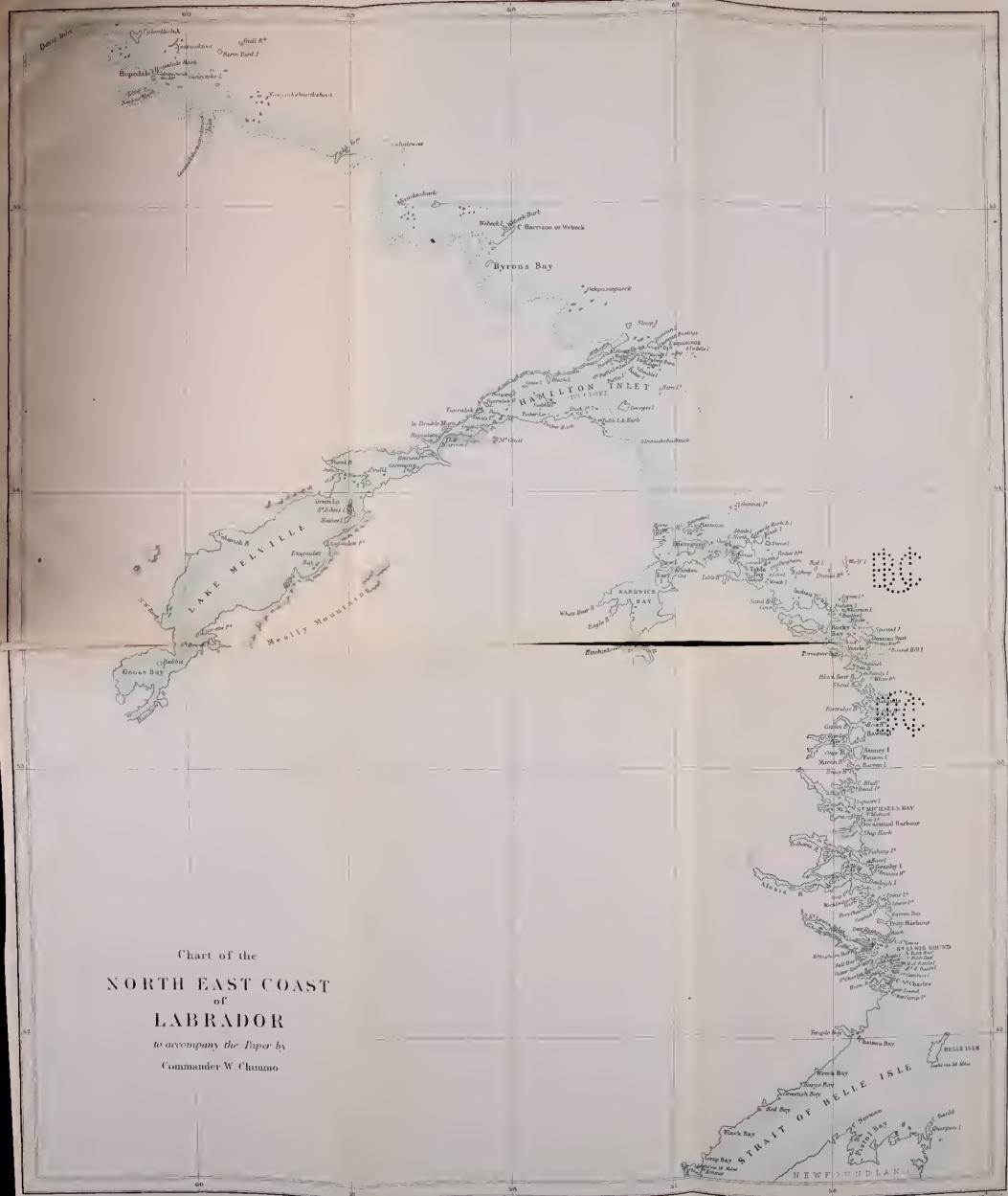


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X.—*A Visit to the North-East Coast of Labrador, during the Autumn of 1867, by H.M.S. 'Gannet,' Commander W. CHIMMO, R.N.*

Read, May 11, 1868.

THE object of our voyage to this little known part of the world, so seldom visited, was to search for new fishing-grounds, and to find harbours of refuge for the Newfoundland fishermen; the cod fish and their food (the herring and other fish) having of late years become insufficient to remunerate them, or even to realise a fair cargo.

The Chamber of Commerce of Newfoundland having urged the Governor to represent to the Secretary of State for the Colonies the benefit that would arise from a survey being made of North-East Labrador, and the advantage it would be to the community in the prosecution of the fisheries, as it was a service scarcely within the power of the Local Government to accomplish, and that such friendly action on the part of Her Majesty's Government in the matter would tend to create a cordiality of feeling among the mercantile community, which would produce very useful effects in dealing with questions connected with the fisheries, which are likely soon to be agitated. The Secretary of State was induced to request that the Admiralty would send a vessel of war to the Labrador coast during the season of 1867 for that purpose, and their Lordships accordingly gave directions to the Naval Commander-in-Chief on the North American station that a vessel should be sent.

It was, however, considered by the Board of Admiralty and their Lordships' hydrographer that it would not be feasible to make an elaborate survey of 500 miles of coast at present, which would reach over many years, and, indeed, that it was the province of the fishermen to search for their own grounds. It was, nevertheless, decided that the *Gannet* should proceed on this service, and after refitting and preparing for the cold and boisterous weather, as well as the intricate and dangerous navigation of the bleak and barren Labrador, she sailed on the last day of July, 1867.

July 31st.—We turned our backs towards Halifax, and after the signal was answered "permission to-part company," steamed out with full steam and all sail.

The morning was beautiful; the barometers had risen to 30°.40ths, and the weather had to all appearance changed from south-east, and south-west gales, heavy rains and fogs, which had lasted for thirteen days; indeed such a continuance of boisterous and wet weather had not been felt (during the

summer months) for many years; heavy thunder-storms, with lightning and rain, also passed over Halifax. Now, with the first of the new moon, we hoped for better.

It was at first intended that I should call at St. John's Newfoundland, for pilots, but from all I could learn from old and experienced persons, who had passed their life-time in South Labrador, there were no pilots there who knew anything of North-East Labrador. Their knowledge was within the Gulf of St. Lawrence only, and to Cape Charles, beyond and north of this no person knew anything, except of north gales, icebergs, and arctic currents, or, as Falconer says, "Bleak coasts of savage Labrador." Calling at Sydney would save me 280 miles.

The passage up the east coast of Nova Scotia was pleasant, but the heavy swell had not yet subsided, which the late unusual weather had caused. The small rock marked on some of the charts, 20 miles E.S.E. of Devil Island Light, Halifax harbour, does not exist. We passed over its position. Brig Rock, and the new light-house on Egg Island were passed at noon.

Aug. 1st.—A calm and lovely night was passed through many small vessels, whales sporting, and at 10 A.M., on the 1st of August, rounded Scutari Light, and shortly after Fern Island. Many vessels could be seen struggling under all their canvas for Quebec and the St. Lawrence, taking advantage of a light south wind, and a charming clear day.

We entered Sydney harbour at 3 P.M. Several pilot-boats were very anxious, by holding up a flag, that their services should be called into request, but as Sydney harbour looked so clear of dangers, and so free for any vessel, we thought we would not trouble them. Their little whale-boats looked very snug. In Morien or Cow Bay, on the north-east side of Cape Breton Island, a considerable town, with here and there a church spire, has sprung up since the chart of 1859 was published. Several large vessels were at anchor in the bay.

A wreck of some ill-fated vessel lay on the beach in Schooner Cove, and another in Indian Bay with masts gone. At Bridgeport there were a number of vessels loading with coals, and, indeed, along the whole of this coast there were evident symptoms that the mines were at work, giving life and employment to many hundreds of persons.

We arrived in the beautiful harbour of Sydney at 3 P.M. The *Alma Jane*, our coal vessel (which should have been in Labrador), anchoring at the same time. She had been in fog and calm off Scutari Lighthouse for several days, and had only now arrived. We ran under the coal-shute, and received our coal, taking as much as we could stow. I walked through Sydney to get clear of the coal-dust. The Victoria, the Prince of

Wales, the New Dominion, the Cape Breton Hotel, had inviting signs over their door-ways. The boarding-houses were numerous. A patent slip, capable of taking up a vessel of 800 tons, and two smaller ones, a Post-office (which was also a hospital for old and worn out parasols), kept by a very obliging but loquacious Scotchman, who would show me all the various postage-stamps of Nova Scotia, and which he declared "were the most beautiful in the world." Sydney was evidently progressing, and fast too. Coal was in abundance at 10s. per ton, and many small vessels were filling up.

The *Red-buoy* on the sand spit was gone; it was useful for rounding it. Some warping-buoys would be convenient off the coal-pier. I think Sydney harbour is worthy of many improvements. We were fortunate in getting many bullocks and sheep to take on our voyage with us.

At 7 p.m. we started again on our voyage north, anxious not to lose a moment of the south-east breeze, that was then blowing; and we steered for St. Paul's Island. I was anxious to see it and make a sketch of it; but at four in the morning, just as we had made the light, fog, mist and a south-east wind came on, obscuring everything! Barometers fell two-tenths, and we had a brisk south-east wind.

2nd.—The current between Sydney and St. Paul's was south-easterly, one mile per hour. At noon we saw the high land of Cape Auguille bearing south-east about 10 or 11 miles; but here a dense fog came on, and we anxiously looked for Cape St. George, but we could scarcely see the jib. Rounded to and sounded at 3.30 in 78 fathoms, sand. This showed we were not dangerously near the Cape, but we hauled out two points. Ran anxiously under sail and steam in a dense fog during the night, at the rate of 7 and 8 knots. Time was too short and valuable to stop or to go easy, and as I knew that large vessels did not frequent our track, and that we were too far out in deep water for fishing-boats, I trusted to good fortune to take us along.

3rd.—At daylight the high land about Portland Creek was visible E.S.E. about 15 miles; patches of snow here and there on the mountains. We hauled in for the land. The weather was wet, dark, and gloomy. At ten the progress of the vessel was well-nigh stopped by an alarm of "Fire." Some mats at the back of the boilers, together with some soot which had been swept from the tubes, took fire. The fire-bell was rung, sail shortened, and the vessel stopped. In a few minutes it was put out, and danger was over.

In the mean time the barometers had fallen three-tenths suddenly, and the wind shifted to north-east, with a downfall of

rain, sufficient to put out any fire without the aid of engines or fire-buckets. Furled all sail, and stood in easy for what we supposed "Rich Point." This was a gale severely felt all over Nova Scotia; at Halifax it blew with terrific violence; some of the vessels secured to the dockyard tore their bits out and did other damage. At Sydney, where we had just left, great damage was done to the shipping and wharves. Barometers again rose as suddenly as they fell; and, with a violent burst of wind from the north-west and north, cleared away everything to a bright sunshine and clear evening, showing us St. John's Island and Harbour, which we would have gone into had not the wind been blowing directly on the land. We therefore stood off for the night under try-sails. The aurora burst forth brilliantly in an arch from north-east to north-west, and lit up the heavens, which, together with the stars, left us very little darkness during the night.

It moderated so much about 10 P.M. that I proceeded half speed on our course for "Amour Lighthouse," and we passed it at 4 A.M.

4th.—It was a lovely morning, calm, and everything bright. Small icebergs soon began to show themselves in-shore aground, and appearing like small vessels with very white sails. Forteau Bay was crowded with small fishing-vessels, also Black Bay and Ains-à-Loup.

Off Wreck Bay the icebergs commenced in all fantastic forms and shapes. The first seen was 80 feet high, perfectly white, with a streak of ultramarine here and there, aground. Around it were whales, ducks, Arctic puffin, divers and tern of nearly every description. It was certainly a grand sight.

At 10 passed Château Bay, with a few vessels, having their colours flying; several bergs aground off it, and between it and Belle Island a fleet of small vessels, and a steamer distorted in the most irregular manner by mirage. The steamer was going south-west. Here we had a view of and passed close to several grand bergs. They were grand indeed, towering far above the mastheads of the Gannet, here and there splitting and falling with a roar equal to that of a cannon. I had never seen, although in and about Behring's Straits for six years, so grand an ice sight. All there is field and wall ice, no bergs, such as we viewed to day aground in 20, 40, and 60 fathoms.

Cape Château, off the Bay, is so called from the remarkable resemblance which it bears to an old castle. Its turrets, arches, loopholes, and keeps, are singularly represented by a series of basaltic columns. Time would not permit a drawing to be made. It presented as attractive a scene as the noted cave of

Fingal, or the celebrated Giant's Causeway. Off Peter's Island we unexpectedly got 10 fathoms, and I hauled out.

A day or two afterwards one of the men said that he saw a rock under the ship's bottom (from the forecastle) at the time of getting 10 fathoms, but said nothing of it at the time. If it was so the vessel had a narrow escape, but I have some doubt of the truth of the report.

A berg off this bay was perhaps the most attractive we had seen. The temperature of the water on passing it was 35° , 13° less than we had a few minutes before at half a mile distant. It was 180 feet high, and at its base were two remarkable small bergs like hay-stacks. Some of the bergs were covered with birds of the diver and tern species, fishing as if from a rock. On passing a berg, the cool wind which came off it made one shiver again. A sun halo was measured of 46° diameter, showing that rain or fog was at no great distance.

One berg we passed, which had recently split in two, and now formed two wedge-like pieces, very striking, about 80 or 90 feet high. It was at once evident what a very dangerous place for navigation the Straits of Belleisle must be, in darkness or in fog, with these numerous dangers, some fixed, some drifting. To strike against one would be more fatal than running against an island; there you might possibly get a landing; on an iceberg, never!

In the afternoon, favoured by smooth water, we got out of the Straits; and after rounding the Battle Islands, and winding our way through many icebergs, entered St. Lewis' Inlet, bidding adieu to the last lighthouse we should for some time see, that of Belleisle; passed the dangerous reefs called the "Ribs," which were breaking heavily, and steered up the inlet for Fox Harbour. An iceberg had grounded directly in front of the entrance, and made the navigation very difficult, causing us to get into 3 fathoms on the east point, and we narrowly escaped grounding; anchored in the centre of the bay in 6 fathoms, finding not one vessel, where I had expected hundreds; and this was our first anchorage on the east coast of Labrador.

"Fox" is a very small but snug harbour; only three or four vessels could ride at single anchor in it. Three or four families live on shore all the year round. Some have been here for many years, and gain a livelihood by fishing for salmon (in the next arm), which they send over to Battle Harbour when cured. "There," they said, "pilots can be had, and all information obtained about fishing and the coast of Labrador."

The anchor was scarcely down when the prognostications of the sun halo were fully verified. The rain came down in

torrents, and we really congratulated ourselves at being safely at anchor after four days of toil and real anxiety, particularly on the west coast of Newfoundland, so dangerous and so little known. This very unusual and changeable weather was to be expected from the remarkable oscillations of the barometer. On the first it stood at 30.50, and rose to 30.60 suddenly. On the 2nd it fell 3, in a heavy fall of rain. On the 3rd it fell very suddenly to 29.67, and rose again as quickly to 30.50, and even up to 30.67 on the 4th, when it again fell three-tenths, and heavy rain from south-west was the result. These ranges of one inch were naturally attended with sudden changes of weather.

5th.—A fine north-west wind, ice breaking up. The berg which was aground at the entrance shifted its position to 8 fathoms. Sounded in the boats across the entrance in brash ice, 3 to 5 fathoms. The ice this season has very much injured the salmon-nets, and rendered the catch very small.

Weighed at 7.45, and sounded across to Battle Harbour, a few soundings being much required in Lewis Sound. In running into the anchorage of 11 fathoms struck 3 fathoms off, a point not marked, and nearly grounded; backed out at once, full speed, and then steered in again; but finding no less water than 12 fathoms without actually touching the rocks, backed out and lay off and on. Here the agent (Mr. Bendle), for Slade and Co., came on board. He says that all the fishing-vessels are at Webeck, C. Harrison; and, to use the usual term, "do what they like with the fish." The salt was all expended, or, as they term it, "wet," and vessels were now "turning up" hourly; that is, coming from the north, loaded. The agent sent, at my request, for two of the most intelligent and experienced fishermen, and an Esquimaux from Indian Island; they said fish was abundant, as much as they wished for; all the fishing was "shore fishing," no such thing as "bank fishing." The fishermen knew the grounds and the harbour too, but vessels could not be got to bring the fish south; they could not ensure them, as "Lloyds" were aware of the dangers of the navigation; but when charts were made of the coast and harbours, then vessels would come there. They had no pilots at Battle Harbour who could be of any use to me; at Occasional Harbour I would probably get one.

There were about 300 persons at Battle Harbour prosecuting the fishery, but this season they only got "half cargoes." The ice had been unusually thick this season, and made the fish "lazy!"

We amused ourselves for a few minutes firing shot and shell at a berg with the 100-pounder and Armstrongs, but they had

no more effect than firing at a mountain, although we picked out a berg about 70 feet high, standing like a wedge out of the water. The coast was very interesting, though bare, passing "Petty Harbour," Alexis, and Gilbert Rivers.

The north wind having died away, fog threatened to seaward, and we had to use all our steam and sail to reach an anchorage. However, a light wind coming off the land kept it away. The mirage distorted the land into the most inconceivable shapes. I took a sketch of the entrance to Occasional Harbour, but in a minute or two I did not know it. I could hardly recognise the "Twins" going into the harbour. One was an island, the other a flat rock, as unlike twins as one can possibly conceive.

We anchored in Occasional Harbour after much difficulty in finding less water than 15 fathoms. The place was crowded with boats fishing close to the shore. The banks were dotted with tents and fish stages, the rocks covered with fish curing and drying. We picked up a seven fathoms bank close to the shore, on the south-west side, on which the capelin were in abundance, but cod would not take the bait. "All the fish," they said, "have been taken at Webeck."

There was so much ice this season that it chilled the water, and made the fish so lazy and torpid, that they would not take bait, although the fish could be seen at the bottom in thousands like a wall. They could be jigged in small quantities, but nothing would coax them to bite. A dish of fried capelin is indeed a treat. The capelin is peculiar to Newfoundland and Labrador. It is a very delicate fish, resembling a smelt. Its visits are during August and September, for the purpose, no doubt, of spawning on the beaches. At times they are so numerous as to darken the sea for miles, while the cod feed on them with the utmost voracity.

The manner of the capelin spawning is one of the most curious circumstances attending its natural history. The male fishes are somewhat larger than the females, and are provided with a sort of ridge projecting on each side of their backbones, similar to the eaves of a house, in which the female is deficient. The female, on approaching the beach to deposit its spawn, is attended by two male fishes, who huddle the female between them, until her whole body is concealed under the projecting ridges, and only her head is visible. In this state they run all three together with great swiftness upon the sand, when the males by some imperceptible inherent power, compress the body of the female between their own so as to expel the spawn from an orifice near the tail. Having thus accomplished its delivery the three capelin separate, and paddling with their whole force through the shallow surf of the beach, generally succeed in

regaining once more the bosom of the deep. It may be ascertained beyond a doubt that the evacuation of the spawn is caused by compression, because, when taken in the hand, the female capelin invariably yields up its spawn the moment it receives the slightest pressure from the fingers.

6th.—At 4 A.M. cold, but fine. Strong north-west wind; weighed and started for the north. The navigation was rendered doubly anxious and dangerous from icebergs and masses of ice breaking up from Occasional Harbour to Seal Islands. Passed vessels in numbers running south with full cargoes of green fish before half the season was over. In every cove and harbour passed we saw many fishing vessels, boats fishing off rocks wherever the eye wandered in all directions, and in some harbours there were 1000 boats.

When off "Round Island" we obtained the position of the most easterly point of Labrador. Its latitude was correct; its longitude $10\frac{1}{2}$ miles too far east; the variation 37° W. This position (which there was no doubt about) placed the ship on the top of Pond's Island. The whole coast is 10 or 11 miles too far to the eastward, and I can never feel that we were much indebted to Mr. Lane's chart. It was found in many points simply imagination. Even a correct eye sketch would have been more correct and useful.

In passing the "Indian Tickle," our least water was three fathoms; indeed, that was little enough for a stranger. Winding through this Tickle was exceedingly pretty. Everywhere vessels and fishing boats; people running down to the fish stages, gazing at us with wonder and astonishment. Full of anxiety, we passed safely through the Tickle; but then an east wind set in and brought a black and rolling fog within $1\frac{1}{2}$ miles of us, covering up islands and reefs, and threatening to envelop us. So we returned, and anchored in five fathoms in Indian Tickle harbour.

Here, in less than half an hour, 126 codfish were taken by hook and line. Some were caught by the back, some by the eye, some by the belly, two were on some lines, by the men and some of the young officers.

Scarcely had the anchor been down when a south-west wind blew all the fog to sea again. I did not like to see a fine evening slip by (as time was very precious), so weighed and steamed for Gready anchorage, passing through fleets of fishing vessels, and anchored at 8 P.M. Full speed and sail got us in safely before dark, and we anchored in eight fathoms. Here we were visited by the agent of Lamour and King, of Plymouth. He said his people were suffering much from sore eyes, caused by ice and the cold south-east winds, which had been very

prevalent. Indeed, for the first two or three days my own eyes were so inflamed that I had to leave off looking through my glass.

The aurora was brilliant at night, and was followed by west and north-west winds, with heavy squalls of wind and rain from the north. Banks, with fish, east of Cape Webeck 50 miles were reported by a boat's crew.

7th.—Started early with a fresh west wind for Indian Harbour Esquimaux Isles, where Sir L. McClintock finished his line of soundings from Greenland. At 9 A.M. we sailed out of the chart by "Lane," and, indeed, I was not sorry for it, when I found an island like "Gready" not even inserted. Every other detail was equally incorrect. The Doctor's advice was everywhere sought after. The moment they knew that there was one on board off they rushed and pulled him on shore. They are entirely without medical aid, and trust altogether to nature.

At noon, passed between George Island and Hern Islands in Hamilton Inlet, without seeing the group of sunken rocks placed on the chart; ran a line of soundings across, and found the distance from Gready to Indian Island to be 45 miles, instead of 55 on the chart. A strong outset from the inlet was felt, obliging us to steer two points to windward of our course: found the whole passage deep and clear.

In a violent squall of wind and rain from the north anchored in the outer anchorage of Indian Island in six fathoms; white sand; fishing boats rushing into port to avoid the squall. At 5, the wind having lulled, shifted our anchorage to the west side of the island, and anchored in six fathoms, apparently near the shore on either side, but on sounding found three fathoms close to the rocks.

Landed and visited Mr. Norman, the chief agent, and made arrangements about the *Alma Jane* landing our coals on arrival, and for pilots to Webeck and Hopedale. The Esquimaux was absent, but was sent for at once.

It was extremely difficult to obtain pilots at all, for the Esquimaux did not like to have charge of a large vessel which they were quite unaccustomed to, and the fishermen would not leave their lucrative employment to act as pilots, and this threatened to be a very serious difficulty indeed.

On entering Indian Harbour every rock was covered with fish drying and curing, men carrying wet fish in barrows from their boats to the "washhouse," boats arriving with their loads of fresh caught fish, brigs and brigantines laying ready for their cargoes, people rushing down to all points to see a man-of-war steamer, Indians going to the tops of hills and peeping over in wonder at us as we twisted our little vessel among the rocks

and islands. It had now cleared up a lovely evening, and it was altogether a very novel and interesting scene.

Five brigs were waiting for cargoes of fish, each vessel insured by its own insurance company.

8th.—Prepared for surveying the harbour. No Esquimaux pilot had arrived, and it may take many days before they could pack their traps, say "good-bye," and prepare to start. After measuring a base, started at noon for Webeck, Cape Harrison.

The strong north squalls had now commenced and may be almost expected daily. Herrings were anxiously looked for by the fishermen, as they had now no bait, capelins having got coarse. Herrings were about, but they would not "mesh." The fishermen make 10*l.* or 15*l.* more on the voyage; but now the capelins having grown large and coarse, "you may as well throw down a stone to the cod; they won't take it." On sighting our anchor we found, to our surprise, both flukes gone—a most unaccountable accident, for we anchored in sand. Shifted our sheet-anchor for a bower.

A clear passage was found north to Cape Harrison from Cut-throat passage; but the currents have been found invariably to the south, only changed by a strong south-east gale. On passing from Indian Island to Webeck found numerous fishing-boats "jigging," that is, with two hooks backed and a lead between resembling a small fish, in which manner they are caught by all parts of the body, head, tail, fins, &c.

In some of the fishing-ports scarlatina had made some ravages; and it was much dreaded here, but had not made its appearance yet.

The distance from Cut-throat to Webeck, by patent log, was 44 miles; by the chart it was 27. Probably Webeck will be found farther north in latitude. In the track from Cut-throat to Webeck we passed Sloop Island, and 14 miles north from Cut-throat "Quaker's-hat," an island 25 feet, with a reef about 15 feet above water this side of it. There is an island, Split Island, 50 feet high, on the port hand in Byron's Bay, 16 miles from Cut-throat, bare and rugged, having a detached rock on the north and south sides of it. None noticed on the charts.

We ran anxiously along in untravelled waters until arriving at Webeck at 9.30 P.M., anchoring in 8*½* fathoms, passing through the North Channel over a 12-feet rock, as the fishermen said, on arrival; but we did not get less than 9 fathoms in the channel. We felt a strong indraft into Byron's Bay, and evidently a strong northerly set.

At Webeck we were informed that there were 200 sail of fishermen 180 miles north of this to Windy-tickle, and the best fishing along the coast has been at Webeck.

After a dead calm and a gloomy sky, with no indication by the barometer, it came on to blow a gale from south. Webeck is a good and safe harbour, but bad for the fishermen. They cannot get their small boats alongside in a breeze of wind.

9th.—Prepared for the survey of Webeck, although blowing a gale, by putting up stations, getting sights, and measuring a base. The wind gathers into the anchorage in a most unaccountable manner, while blowing only moderately outside, as well as in the harbour south of this. The fierce steady gale pressed very hard on the vessels in the bay. Towards evening there was a shift to west, with lightning and heavy clouds, and, during the night, thunder, lightning, and rain.

Blasts of hot wind, raising the thermometer to 72° , were very singular, and felt by all on board. The blasts were from south-west.

10th.—Pretty fine. Measured the base; got all our magnetic and "fox" observations, and commenced the triangulation of the harbour. Several vessels sailed to-day with fish for the south.

12th.—The barometer fell, with the weather, .3, and the rain and east wind continued forty hours, when it began to veer north, and then the barometer rose with it. This cold, raw, and wet weather did not prevent the fishing-boats going out to fish.

13th.—We had exactly forty-eight hours of hard rain, with cold east wind off the ice. Then the wind backed to west and south-west. The barometer fell to 29.35 during the night, and the morning looked gloomy and threatening; but after a little northerly puff the day cleared off most beautifully and enabled us to get on well with our survey. Barometer now began to rise.

Having previously obtained our first set of equal altitudes for the meridian distances, taken the magnetic observations, and measured a base over huge boulders of granite, and amidst clouds of hungry mosquitoes, we were ready to commence the boat-work, having fixed sufficient objects for sounding. My orders were never to leave the ship without a boat, for fear of accidents; but the *Dinghy* being called into requisition for observing tides and for landing a party with the theodolite, and for other purposes, the copper punt did her duty.

Lieutenant Wharton, my senior assistant, generally took the first cutter, and with him, one of the midshipmen, Mr. Cuthbert to assist, always sounding in parallel lines, and in this manner a good many miles of water was pulled over during a long and calm day. Mr. Covey, the Navigating Lieutenant, with Mr. Rogers, midshipman, took the second cutter and sounded in the same manner; and the two young midshipmen very often obtained a keen and

sharp appetite for breakfast by starting very early and white-washing all the smooth-faced rocks and prominent points with the various letters of the alphabet and the Roman numbers. Mr. Baillie, Navigating Sub-lieutenant, occupied the gig (a new and convenient boat which belonged to the *Royal Alfred*). He, like myself, had no assistant and had to work his wits and fingers pretty smartly to take angles, soundings, note them down and plot them, and steer the boat as well. I had boards fitted to lay across the stern-sheets, so that the work was put on the rough sounding sheets in the boats, and in this way no blanks were left, and the soundings were always complete for that day. The "whale boat" was usually my boat for work. The angles at the main stations, the coast line, and the soundings about any reefs, or dangers, generally occupied my time. And lastly, the dinghy, with the pilot and a quarter-master observing the tides, exhausted our complement of boats. I could well have worked one or two more if I had had them.

Generally, at six, the boats were called away, and the men always took their dinners of preserved meats with them, landing if possible, and having their dinner-hour without interruption. Although hard work, pulling and sounding all day, particularly if wet and cold, yet they like it. They like the change from the monotony of cleaning arms, guns, brass-work, and sweeping decks.

From the top of Webeck Island we counted fifty-two large icebergs aground in the offing.

14th.—At 5.30 A.M. recommenced our survey, and at noon, having nearly finished the harbour, started for Indian harbour to meet our coal vessel, as the delay in meeting her would cause heavy demurrage of 4*l.* per day, the Hudson Bay steamer passing us going north. We sounded all the passage between Webeck and Cut-throat run, finding, from 12 to 18 fathoms, stones: a clear run of about 37 miles without a danger.

On arriving at Indian harbour, to our surprise, found the *Alma Jane* hove to, ready to go in. She had just arrived, and, as if by magic, we had both turned up together. We entered the harbour and moored, getting the coal vessel lashed alongside us.

15th.—In a dense fog commenced coaling, and had 50 tons in by evening. It turned out a lovely day at noon, and we progressed with the survey which had been previously commenced. At 9 P.M. a heavy squall came on from north-west. The glare of the moon, which was at full, reflected on the clouds, and the aurora, bursting forth its coruscations here and there, had a very alarming effect. It all passed over in an hour.

16th.—A very heavy thunderstorm, accompanied by rain,

passed over at 3 P.M., while I was out in my boat at Baccalao (or Puffin Point). The island was quite precipitous, except at one small cove where the bow of the boat would only fit into. We had to keep the boat off the rocks by pushing out the oars and boat-hooks. The rain came down in torrents, and if the wind had shifted one point we must have jumped out at the risk of safely landing, and abandoned the boat to her fate. The thunder was very loud; the hills reverberated, as if they would split in atoms, and the vivid lightning seen through the rain was very grand. In the evening it cleared up fine, and the Newfoundland steamer *Alert* arrived with Mr. Gedden, to report on the fisheries at each place. He paid me a visit, and reported a timber vessel wrecked on Lark Point, Belle-Isle. Of course I could render no assistance.

It was mentioned to me that the compasses were much affected by the nature of the rock on Observatory Point; but, on investigation, I found it was not so to any great extent. A portion of the rock, when powdered fine, gave a per centage of 4 or 5 per cent. of iron, attracted by a magnet. Some of it placed in tanic acid (the most severe test) showed little or none; and a very delicate compass-needle was deflected only 55 minutes, at a height of 5 feet from the stone. No doubt there is a little, but not much that would deviate the needle. Heavy squalls again to-night, with lightning from north-west. Weather cold.

Sunday, 18th.—Many families came off to-day to join in our prayers, and to see the first man-of-war that had entered the harbour. In the afternoon numerous visitors came from all parts of the Esquimaux group to visit the *Gannet*.

On Monday, the 19th, was a cold wind, north-west, but it did not prevent surveying and coaling; but at one time we were so cold that I had to return to the ship and warm up for a second trial.

20th.—A promising morning. Unmoored and left our snug anchorage, having obtained our Esquimaux pilot, John Took-tooshner, a comic old fellow, with one tooth in his upper jaw in the shape of a V., which made an impression in his lower lip of the same form, by which he may easily be known. He never *knew* anything but “I suppose so;” and a term he often used was “handy by,” meaning close to; his native place, “Windy Tickle.” Carried a line of soundings to Cut-throat Run, and then made sailing directions to Webeck, where we arrived at 2 P.M., sounding off the entrance to complete our plan. We felt quite at home now on this route, recognising all our islands, and reefs, and rocks, as we passed them, as well as the huge icebergs which had now come close on the coast.

Started at 2 for Aillik, over new and anxious ground, passing out of the limits of the North American station at 3 P.M. I conclude that the *Gannet* is the first ship of war which has done that for many years. The evening was fine and the water smooth, with rather a heavy ground-swell from the eastward. We took the outside passage, as the pilot was afraid of a "breaker" between the islands on the inner; he was not yet at home in the vessel, and felt somewhat uneasy. His names of the different islands passed it would be impossible to write down, or even attempt to pronounce without fear of lockjaw; but if my reader (if I ever have one) can imagine a word sounded like the noise a cabby makes with his cheek, and tongue, and teeth combined, when he wishes the animal to go on, for the *first* syllable, and then the call a fowl makes to her brood when she wishes to collect them, for the *second*—the *third* syllable I *can* write—"took"—and by combining these you have in *three* syllables the name of an island off the inlet of Cannuckthowatooktacock!

At 9 P.M., rather dusk, we managed to crawl into the anchorage of "Aillik," or "Eyelick," in 6 fathoms, passing over a ridge of rock with only 3 fathoms on it, which our "Boski" did *not* know. A few lights were seen in the windows on shore. The steam whistle was sounded, and answered on shore by two muskets, and we all retired to bed very tired. We were very thankful that we had arrived at another stage of our journey without a mishap.

Here particularly, as well as along the whole coast, it was impossible not to observe the almost visible rising of the land, by the uniform beaches of boulders, sand, and shells, left to view at 20, 30, and 40 feet above the *now* sea-level. This is also the case on the coast of Newfoundland. It would almost be worth while to make careful observations to determine at what rate the sea is becoming so displaced, and if at a uniform rate along the whole shores and islands; indeed, from my own experience, I believe this change to be visible over the whole world, certainly in the northern hemisphere. Either the water is subsiding, or the land is upheaving.

21st.—Sunrise revealed to us the Hudson Bay settlement of "Aillik," a comfortable red house, a hut near it, a fishing stage and house, and an old store-house; a flagstaff on the hill displaying the red ensign.

I visited the place in charge of Mr. E. A. Goldston (formerly Mr. Bright), with his head man "Rennie Labbie," who had been thirty-five years in the place. Furs were not to be had. He said we were the first vessel of war that had ever visited them. I begged of him to record it in his journal. There was

a large lake of fresh water close to the dwelling, from which a vessel could most easily fill up. Wood was scarce. Small stunted pine-trees in the glen were all that could be obtained. Mosquitoes were in myriads, and their attention to us on landing was very great.

From this we counted sixty-five icebergs—some very large—and a group of sixteen islands without name or place on any charts.

Started at once, the day being fine, for Hopedale, but the weather looked dull and threatening, passing through numerous islands, reefs, and flats. We had to sound very carefully through "Sugar Loaf Tickle," as the pilot was not "sure of it." We got no less than 15 fathoms in its centre. Very few fishing-boats were now seen (they may be further in among the islands). They were always a good guide to me for a deep channel, as they are never in less than 14 fathoms fishing. At (Sugar Loaf) Tickle, from the mast head, were counted ninety-five islands. From the bridge I counted sixty-five, and sixty-two icebergs at one time.

We arrived at Hopedale at 2 P.M., finding only four or five fishing vessels, which were waiting for a fair wind south. At once the Esquimaux came off in their baidars and kyaks, and gazed in wonder at the Oomiak-wak (*Gannet*), the first steamer of war they had ever seen. The brig *Clinker* (Hill), was here in 1821.

I visited the mission under the care of Messrs. Ribback and Kretschmer. The former had been here twenty-five years, and with his wife and family possessed a comfortable house, a good large church surrounded by several Esquimaux huts with innumerable dogs, but there were no hunting Indians here.

We had collected a band of music in some very unaccountable "drums and fifes" way, and our men generally played from 8 till 9 P.M. The moment they "struck up" was the signal for all the Esquimaux and the boats from the fishing vessels to come to us (no women, they are prohibited from visiting vessels by the mission), and the delight of the Esquimaux was beyond description. As I paced the bridge and contemplated our position, then far off the Admiral's command, on the bleak, barren, and almost unknown wastes of Labrador, far from home and friends, surrounded by those who had so lately been savage heathens, but now baptised into Christianity, the feeling which came over me is not easy to describe. Great praise is due to the Moravian missionaries who have worked hard to implant the Christian faith on these apparently animal savages, and they have well succeeded; but on the Indians—"the inland hunting Indians"

—not so. They are so attached to their old superstitions that “they do not hesitate to sacrifice a favourite child on the grave of its deceased parent,” under a belief that their earthly dissolution is at once succeeded by a blissful reunion above.

They are very strongly attached to European clothing, and eagerly barter their jackets, boots, trousers, and garments for any worn-out article of dress. Their huts are comfortably built of logs, floored with plank, and covered on top with turf, on which the grass grows luxuriantly, and sometimes flowers; a small frame in the roof, with the intestine of a seal for a window; a porch outside the door for the dogs. In vain I endeavoured to make a sketch of the inside; the numbers flowing in “to see” quite prevented such a thing, and I could not tell them to keep away. They were mostly fat, very fat, good-tempered women, with their babies dangling in the hoods of their jackets, and squeaking too. One child was sucking a strip of raw fish with the utmost vigour and delight.

During the rain, having nothing else to do, I wandered over the grave-yard, and read some of the *memoriams*. Some I recorded. The graveyard was very large for so small a place, and was a sad illustration of the rigour of the climate. The graves were very neatly kept, painted white, with a wooden border, the headstone was laid on the middle of the grave, and surmounted with forget-me-not and other wild flowers.

The babies are carried in the hood of the mother's jacket, and it is most amusing to see them giggling them, both when walking and sitting, of course the whole fat body going too. The jacket is neatly made of American linen with a hood the edge of which is trimmed with fur, and the centre with a band of embroidery, the cuffs of the sleeves and the tail (which is very peculiar) with embroidery also, the whole trimmed (or edged) with red or blue braid.

The ladies wear sealskin breeches, often covered with a petticoat or gown. The babies are comfortably encased in a thick flannel or blanket dress, skin tight, with a red handkerchief tied over the head, and they look very funny and mummy-like when danced up and down.

All the Esquimaux about Hopedale (about 300) are baptised into the Christian faith, and assume names taken from the Bible. The Esquimaux farther north, who have not yet embraced Christianity, indulge in a plurality of wives.

They have here a great number of their peculiar dogs, so nearly resembling wolves. These dogs are very fierce; they are, however, nearly starved, and a fish-bone thrown to them causes a savage battle until the victor carries it off. They have been known to devour the unprotected children of their masters.

They are very useful for dragging sleighs, wood, luggage, &c., over the snow in winter, and the pups are valued as a delicate species of food.

There is very little intercourse here with the Indians. Unless driven in by famine they do not appear on the coast. They bring all their commodities to the settlements by water in open boats, which they procure by barter, and during the time so occupied the tribe repose at night under tents of sealskin. In general they profess the Roman Catholic faith, by simply worshipping a small picture of the Crucifixion, which they have obtained from the Canadian missionaries, and worn round their necks. They bear a great hatred towards the Esquimaux. The hunting Indian is naturally stupid, cowardly, and superstitious; the Esquimaux, on the contrary, is active, vigorous, and enterprising. The latter bear a strong resemblance to the Tartar and Chinese.

22nd.—Was dull and gloomy. Several vessels were calling in for the night from the north, with green fish to cure, proceeding southward. They have had a good fishing season at Windy Tickle, but could take a few more.

23rd.—We commenced sounding the harbour in the afternoon in rain, but no wind. There was a sort of Scotch mist; however, it did not prevent our sounding. It was quite calm and smooth, and the objects were visible; and I know that we were all anxious to be at work, for it was far preferable to sound in wet and calm than in wind and sunshine. The rain awnings were spread snugly, and oilskin coats were provided for those outside,—leadsman, helmsman, &c., and I am sure that none suffered.

Lieutenant Wharton, in the cutter, went away to the south-east, and sounded all the southern entrance carefully and closely, putting in some rocks and coast-line.

Navigating Lieutenant Covey sounded the north entrance in the second cutter, and navigating Sub-Lieutenant Baillie sounded out the harbour in the gig, and put down many rocks, shoals, and dangers. I amused myself in the mist fixing points, reefs, and dangers, and putting in some coast-line. The dinghy at her usual work, the tide-pole; and any deep soundings left unfinished were put in by the ship, as well as the currents, sailing directions, &c.

24th.—The Moravian mission, Mr. Ribback and wife, Mr. Kretschmer and wife, and all the Esquimaux ladies in their best attire, visited the ship. The missionary gentlemen looked very comfortable, but curious in their entire sealskin suit, the women in their “attigeks” with their sealskin trousers and boots, many

of them having their babies in their hoods, jiggling and lulling them to sleep. As this was the first vessel of war they had ever been on board, they were lost in wonder at our nice *houses*, at the engines, the men's hammocks, and the manner in which the men furled the sails and sent the t'gallant yards down.

During the winter the thermometer falls to 30° below zero, frequently 25° from January to March, and the wind blowing at the same time makes it very cold indeed.

On the island of Zach pencil lead has been found. Copper and gold are also said to exist about Hopedale.

There was no work done by the Esquimaux while the *Gannet* was in harbour. They were all so absorbed in everything done on board that they could not be persuaded to work. When the bugle sounded for hoisting up boats, for quarters, or sunset, they would all rush to the rock to see what was going on. The only word I was perfect in for the few days at Hopedale was "oxeni," which means "How do you do?" It is one of those few words without a "cluck" or a "took."

Sunday 25th.—When at Hopedale we heard that Mr. MacKenzie one of the Hudson Bay Company's officers, had slipped off the bridge of the Labrador steamer when going in, and was unfortunately drowned. He was on his way to Ungava.

We all visited the afternoon service at the church, and certainly a more imposing and interesting sight I have seldom witnessed. There were 57 men, 50 women, 4 men playing the violin, one the French horn, another the bass fiddle, and another the harmonium. The whole of the service was singing one long hymn. Six women were arranged in a back form singing their parts from *printed* music, four men on the opposite side, and all the others joining in.

26th.—In the midst of a north-west gale we finished the survey of Hopedale Harbour, and started for Aillik. The barometer was low, 29.65, the weather gloomy, and at noon rain and cold came on, but by this time the boats had been hoisted up. In our passage we ran over two dangers which might have finished the *Gannet*, but good luck still followed us, and we anchored in safety at the Hudson Bay Company's settlement of Aillik. The gusts of wind during the night were very strong, but we had a snug and sheltered anchorage with excellent holding ground, the two points of the west part of the bay in line. Messrs. Bright and Goldston visited us, and sent their despatches to St. John's by *Gannet*. Here we made an eye sketch of the harbour, which, in the absence of a survey, is useful.

27th.—A cold and windy morning, but fine, and we started

early for Webeck, making sailing directions as we proceeded. At noon we were off Webeck, where we added some soundings and coast line to our chart at the tail end of a thunderstorm which threatened every moment to wash chart and instruments off the bridge, and roll ourselves after them. The north-west gale of yesterday had left a heavy swell, which the ship felt much. We then started for Indian Harbour, where we arrived at 8 P.M., sounding the "run" in, and having another escape by passing over a shoal patch near Ragged Islands. Two young Esquimaux dogs, which were obtained at Hopedale for presents to friends at Halifax, regaled themselves during the night by eating *two pair of shoes* between them, a rather expensive supper for their owners.

28th.—Was fine, but threatened fog. It did not, however, prevent both ship and boats from doing a real good day's work. None were idle to-day. Ship and all the boats were away early. Lieutenant Wharton took the gig to-day as he had a long way to pull. Mr. Covey and Mr. Cuthbert accompanied him. He had to sound and examine Gibson Harbour (for small vessels) as well as Duncan Passage, put in the coast-line of Big Island, sound round the Seal Rocks, and carry a line of soundings to the Duncan Passage,—an active day's work, which was satisfactorily performed, and he only returned to the ship when a strong south-east wind and dense fog made him retreat.

Mr. Baillie took my boat (the whaler) as he had to land on several small islands with a surf on the beach. The coast-line of Double Island and Tinker Island was put in, and lines of soundings between them completed before he returned to the ship.

The ship was occupied all day in putting in lines of deep soundings at the approach to Herbert Island, and on the west side of Sir Rodney Mundy Island towards the Walker or Black Rocks, and with two patent leads going and proceeding half speed except when approaching a danger. A good day's work of 52 miles of soundings was obtained, and we did not desist until late in the evening when a strong south-east wind and fog compelled us to run into Ice Tickle, a snug harbour on the north side of Sir Rodney Mundy Island.

Next day Lieutenant Wharton and myself, in our boats, went to search for the rocks on which so many vessels had struck when running north. They were both found in the passage, one having only one foot of water on it, the other a-wash at low water. I named them Wharton and Baillie. Marks were obtained for clearing them. At the same time Mr. Baillie sounded out the harbour in the gig, and Mr. Covey in the

second cutter sounded the sound entrance to Iey Tickle. The water being smooth and no wind, a good day's work was performed, and we all returned to the ship at 2 p.m.

Three hundred vessels have anchored at one time in Iey Tickle on their way north in July. They come in from the south through the west channel, and out to the north through the east. It is the chosen highway for all vessels.

This has not been the best of seasons for fish. The capelin and cod "spurted" on the 10th June, and the vessels did not arrive until July. The time of the fish visiting is very irregular and uncertain. Herrings not arriving now for bait and for barrelling make it a poor season, the fishermen having nothing further to do.

There were many bitter outcries by the fishermen at the exorbitant price they were compelled to pay for their provisions, absorbing all their small profits. I have no doubt it could be remedied. Three merchants in Newfoundland the other day, partners, dissolved. They retired with 40,000*l.* each, besides the standing property. They had been agents for supplying the fisheries for fifteen years. This will give a small idea of the profits.

30th.—Fog and rain. Shifted round to Indian Harbour, and commenced coaling from the vessel. It was rather hard on the men working in wet and cold, but it could not be avoided; time was too precious, and it will take two days to land the coals.

31st.—A good deal of thunder during the night and "north squalls," which cleared off the fog and rain. The new moon and the Aurora were visible. We were all day landing coals from the brig, a most laborious job, with a boat or two surveying and completing the plan of the islands.

Sunday, 1st September.—Glad indeed all of us to get a day of rest in the full acceptance of the term. The morning was fine, with a cold north-west wind. This month commenced with cold and wet. We had indeed been favoured with good weather. Ducks and wild geese passing over to the southward showed evidences of an approaching early winter, and the wet and cold experienced by those employed in boats all day must very soon end.

2nd.—Fine, but threatening in the north. We finished landing our coals, got up steam, and started for Gready anchorage.

On passing through Gready the boats were taking plenty of herrings, and some of the boats plenty of cod, others near them not catching a fish. The day turned out fine, with a north-east breeze, to which we spread all our canvas.

We anchored at Indian Tickle at 5.30 P.M., in $4\frac{1}{2}$ fathoms, sand and shells. The *Fawn* had been here with the Governor of Newfoundland, and was to revisit shortly. Mr. Warren gave a glowing and favourable description of the value of this tickle as a highway for fishermen. 3000 vessels had passed here this season. Three vessels had struck on sunken rocks. There were upwards of 30,000 fishermen on the coast this season.

3rd.—Was a lovely day, but very cold. Stationed the bay, took sights, measured base, and prepared for survey.

It was said here (with how much truth I cannot say), that Indian corn has been found in the crops of the curlew on their first arrival on this coast. Where do they come from? or where do they get it? Our sportsmen got a great number of curlew, and a snipe was also shot.

In Indian Tickle there were 800 persons, half of whom were Roman Catholics, the remainder consisting of Wesleyans, Presbyterians, and Church of England. The Roman Catholics have a place of worship, and it was contemplated a short time since building a church, the plans of which I saw, cost 500*l.* But the bishop made a mistake, and there is a delay about it unfortunately.

7th.—We have been enjoying a few very fine days of real summer. Yesterday was very hot. I have left a self-registering thermometer here for the winter, to see what the lowest temperature will be. At six this evening a sudden gust from north-east brought cold, and damp, and wind, just allowing our boat time to return from the completion of the survey of Indian Tickle.

Here we obtained our last series of latitudes, longitudes, and variations; and I have shown a small plan of the difference that existed in former charts, and those found by us. Generally the coast is 11 miles too far east; latitudes pretty correct.

We had much difficulty with our magnetic observations from the quantity of iron that was present in the rocks. It deflected the needle 12° at this place, and all our observations had to be repeated at another. This was rather provoking, as the observations had to be taken with four different instruments, and some of them delicate ones.

Sunday, 8th.—It blew a north gale, very fierce. We always looked forward to Sunday as a real day of rest after our six days of constant boat work, sometimes 15 or 16 hours a day. Early in the morning a large brig, deeply laden, anchored from the north with both anchors alongside us. At noon, blowing a gale, she weighed again, much to our surprise; and in less than five minutes she was a wreck.

9th.—We steamed out at ten, after receiving the master, crew, and passengers of the wreck, passing the ill-fated *Terra Nova*, and through the intricate tickles, with rocks and hidden dangers around where more than one vessel this season had met her end; also Domino Harbour, a fine sheet of water. Rounding Round Island at 1 p.m., we steamed against a fresh south wind for Occasional Harbour, where we arrived at 7 p.m., and anchored on our old spot in $7\frac{1}{2}$ fathoms on the south side, the only place where shoal water can be had.

10th.—Wild and stormy off the land. Started at 9, making a passing survey of the harbour and soundings. It came on to blow from south-east, and rain with gloomy weather. Ran into Fox harbour, St. Lewis Sound, where there was less difficulty in entering than when the large iceberg was across it in August. We heard that the *Fawn* was at anchor in Marnham Bay. It blew in heavy gusts during the night with rain, the wind having shifted to north-east.

11th.—Started early, and sounded the entrance to St. Lewis Sound, where some soundings were wanting. It was still blowing hard from north-east, but it was no use waiting for fine weather. After that we started for Newfoundland. The weather was dull and stormy; only two icebergs of any size were seen.

In a fresh gale from north-east and a tumbling sea, we rolled past Belle-Isle, crossed the straits, and anchored in the snug harbour of St. Anthony, in five fathoms. Here were several fishing-boats, and stages on the shore; and I must say, from the little I saw, that the Frenchmen looked more substantial and comfortable than those of the Newfoundland. There were at anchor a bark, brig, and several schooners. We found it a very snug anchorage with good holding-ground, but numerous rocks along the shore.

12th.—It looked such a lovely day that we made a very early start, and rattled along 8 knots; but alas! with a fresh south-west wind, a very strong current setting into White Bay from yesterday's north wind, but it did not last long. As we approached Funk Island it came on to blow hard from south-west, with a heavy sea. We got stars to confirm our position. The wind continued until the evening of next day, when moderating a little we turned south.

13th.—At 8 p.m. we were preparing for a gloomy night by seeing (as we thought) the moon getting obscured by a patch of cloud or fog and gradually becoming darker, when to our surprise we saw that it was an eclipse partial, '69 being darkened.

14th.—It blew hard with a heavy sea all night, and the ship

tossed about a good deal. It was too misty to see Baccalieu light, but at eight in the morning we were off the island standing into Conception Bay. The wind lulled a little, and we stood for Cape Francis, passing along the wild and weather-worn coast of Newfoundland; not so barren and washed, however, as Labrador, having a few stunted pine-trees in the glens, which destructive man was firing in all directions. Here and there was a whitewashed house,—a cold and dreary fisherman's winter-residence.

Torbay, a wide open bay with some houses and fish-flakes, was passed; its headlands bare red sandstone. The coast along here was hardly recognisable, and very imperfectly laid down on the chart. After struggling close along the coast against a strong south wind with heavy gusts off the headlands, which were truly bold and grand, we turned into the snug yet narrow harbour of St. John's. It was like going into a summer-house, so warm and so tranquil after our three days' strong breezes. We anchored at 3 P.M. in seven fathoms mud. Here we found the French Commodore, Théodore de Lapelin, in his *Ligiate the Armorique*.

Sunday, 15th. St. John's is an important and stirring place, vessels constantly going and coming, and the wharfs in a state of bustling activity. The boarding-houses and "sailors' homes" are very numerous; and I suppose, like all others, where the unsuspecting and simple tar is taken in and done for.

One cannot avoid noticing the many poor and distressed about the streets of St. John's, and the numbers constantly appealing for alms. If I am not in error one-third of the revenue is annually given in aid of the poor. Why is this? Simply because the fisherman is robbed, and has nothing to give his wife and children after his hard season's fishing. I acknowledge that some are improvident, and it is difficult to wean them from old habits; but there are some few of the 30,000 who would (if they could) lay by a few shillings if it were possible to get it.

17th.—The leading members of the Chamber of Commerce paid a visit to the *Gannet* to see the result of the first voyage to North East Labrador, at their suggestion. They appeared very much interested and delighted at the prospect of soon having charts for their vessels to sail by. They declared that no request from the Government of Newfoundland had ever been so promptly carried out by the Imperial Government as the one now before them.

18th.—The Governor, his Excellency A. Musgrave, paid the ship a visit to-day for the same purpose, and expressed much gratification at the interest shown to improve the condition of

the many thousands of fishermen and their families depending on the fisheries for their support.

There are good accounts in all quarters from the Tilt-Cove copper-mines. The copper is said to be second to none in the world, realising 20*l.* a ton. Shipments are constantly taking place, affording a cheerful prospect to any who may be thrown into distress by failure of the fisheries. I am sure that on the coast of North-East Labrador similar mines will be found, and all that is required is a small capital and a little energy to work them successfully.

I find, on referring to the returns in the Government office of the number of fishermen employed in Newfoundland, there is nothing definite known; but in 1857 the population was 122,000: 800 vessels were employed fishing; in these were 15,000 men, and the tonnage 60,000 tons. The fishing-boats were 12,000 in number. Surely these numbers are worth looking after and improving.

19th.—Strong south-wes^t gale and rain prevented our starting, but in the evening it chopped round suddenly to north-east, and we were off. Running down the coast of Newfoundland we were off Cape Cod light at midnight, 9 knots an hour. There was a heavy sea left by the south-west gale the night before, and the *Gannet* dived a little into it. Next day, unexpectedly, we had a fine north and east wind, and we rattled along briskly.

While at St. John's, we found by nine separate observations, two days following, that the variation of the compass was $30^{\circ} 41'$ w., and not $32^{\circ} 21'$, as the chart shows.

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